

NETHAVATH PRAVEEN

Undergraduate Student at IIIT Hyderabad

✉ praveennayak045@gmail.com |  LinkedIn |  GitHub |  Portfolio | 📞 9391206849

Education

International Institute of Information Technology, Hyderabad (IIITH)

Aug 2023 – Jul 2027

B.Tech in Electronics and Communication Engineering (ECE)

Jawahar Navodaya Vidyalaya (JNV), Warangal & Puducherry

Secondary and Senior Secondary Education

Experience

Order Management System

Jan 2025 – Apr 2025

Software Intern (Remote)

NVIRI Solutions Demo

- Developed a cross-platform mobile application enabling merchants in both F&B and non-F&B (e-commerce) sectors to efficiently manage and track customer orders in real-time.
- Followed **Clean Architecture** principles using **Flutter** for frontend and a **Java SpringBoot**-based **microservices** architecture for the backend.
- Designed **PostgreSQL** schemas from scratch with 35+ relational tables to handle large volumes of structured data.

Projects

EmpathEcho — Conversational Emotion Recognizer

 [GitHub](#)

- Developed an **AI assistant** using **Whisper (OpenAI)** for speech input, a **fine-tuned BERT (HuggingFace)** for emotion detection, and **gTTS** for audio responses.
- Integrated **Flask-Sock** for WebSocket streaming, the **Google Gemini API** for contextual replies, and **Pydub/Sounddevice** for real-time audio playback.

CampusMart @ IIITH

 [GitHub](#)  [Website](#)

- Engineered a comprehensive MERN stack marketplace for the IIIT Hyderabad community, incorporating 3 core data models and 15+ RESTful API endpoints with robust security features including JWT authentication and bcrypt password encryption.
- Core functionalities include user registration restricted to university domains, dynamic item search with multi-category filters, a responsive shopping cart system, and user profiles with detailed transaction history, powered by 10+ modular and reusable React components.

COVID-19 Data Visualization Dashboard

 [GitHub](#)  [Website](#)

- Engineered a multi-view data visualization dashboard using HTML, CSS, and JavaScript to analyze COVID-19 and Air Quality Index (AQI) data across global, national, and regional scales for 5+ major Indian cities.
- Implemented a client-side data pipeline with D3.js to asynchronously fetch and parse multiple CSV datasets, powering a suite of interactive charts and maps to reveal correlations between pandemic lockdowns and air quality.

RISC-V 5-Stage Pipelined Processor

 [GitHub](#)

- Designed a 32-bit RISC-V processor in Verilog with both single-cycle and 5-stage pipelined architectures, implementing full hazard detection and resolution.
- Developed core modules including ALU, Data Memory, and a **Forwarding Unit** to handle data/control hazards through forwarding and pipeline flushing.

Technical Skills

Languages C, C++, Java, Python, HTML, CSS, Javascript, SQL, Bash

Databases MongoDB, MySQL, PostgreSQL

Frameworks/Tools Express.js, React.js, Node.js, Spring Boot, Flutter, Flask, Git, GitHub, Arduino

Leadership & Achievements

JEE Mains AIR 2107

JEE Advanced AIR 3894

FFE Scholar

NSS Co-ordinator (Spring 2025 – Present)

Felicity Fest Marketing Team Member

NCC 'A' Certificate Holder